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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,782	05/09/2001	Tsuyoshi Ichibakase	5077-000037	3290
27572	7590	05/07/2004	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			COLON, GERMAN	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 05/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/851,782	Applicant(s) ICHIBAKASE ET AL.	
	Examiner German Colón	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3,5-11 and 14-20 is/are pending in the application.
4a) Of the above claim(s) 14-20 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 3,5-7 and 9-11 is/are rejected.
7) ☒ Claim(s) 8 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/25/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The Amendment, filed on February 3, 2004, has been entered and acknowledged by the Examiner.
2. Cancellation of claims 1-2, 4 and 12-13 has been entered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 5-7, 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 39-1585 in view of Cawlfeld (US 5,246,025).

Regarding claim 3, JP '585 discloses a method of cleaning a translucent tube for a discharge lamp, comprising the steps of:

introducing a cleaning fluid from one end of the translucent tube; and

allowing the cleaning fluid to flow while bringing the cleaning fluid in contact with at least an inner face of the translucent tube, thereby removing impurities attached thereon. JP '585 is silent regarding the limitation of "disposing the translucent tube in a container; injecting the cleaning liquid into the container; and elevating a liquid surface of the cleaning liquid above an upper portion of the tube.

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However, Cawlfild discloses a method of cleaning a work piece (see Col. 1, lines 12-15) comprising the steps of:

disposing the work piece in a container for containing a cleaning liquid as the cleaning fluid such that ends of the work piece are positioned in a substantially vertical direction (see Figs. 3(a)-7); and

injecting the cleaning liquid into the container, and

a step of removing impurities including the steps of:

elevating a liquid surface of the cleaning liquid above an upper portion of the work piece; and lowering the liquid surface of the cleaning liquid below a lower portion of the work piece;

wherein the step of elevating the liquid surface of the cleaning liquid and the step of lowering the liquid surface of the cleaning liquid are repeated.

Cawlfild teaches this method to provide a controlled fluid flow that is continuously agitated for repetitively delivering fresh fluid against the treated surface of the work piece (inner surface of the lamp) to optimized the cleaning procedure; and that failure to provide said fresh fluid reduces the operative effectiveness of the cleaning fluid resulting from contamination and dilution (see Col. 1, lines 20-27, 45, 56-61; and Col. 2, lines 1-2, 12-15, 37-38 and 46-50). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the method disclosed by Cawlfild to clean the lamp disclosed by JP '585, with the purpose of providing a controlled fluid flow that is continuously agitated for repetitively delivering fresh fluid against the treated surface of the work piece (inner surface of the lamp) to optimized the cleaning procedure, while reducing operative ineffectiveness caused by failure to supply a fresh cleaning liquid.

Regarding claim 5, JP '585-Cawlfeld discloses the step of lowering the liquid surface of the cleaning liquid being performed such that the liquid surface of the cleaning liquid is lowered below a lower end of the translucent tube (see at least Figs. 4(a)-4(c) and 5(a)).

Regarding claim 6, JP '585-Cawlfeld discloses the step of elevating the liquid surface of the cleaning liquid being performed such that the liquid surface of the cleaning liquid is elevated above an upper end of the translucent tube (see at least Figs. 3(a)-3(c) and 6, and Col. 5, line 9).

Referring to claim 7, JP '585-Cawlfeld discloses the claimed invention but is silent regarding the limitation of discharging the cleaning liquid from the container. However, Cawlfeld teaches the desirability of providing a fresh fluid for the cleaning of the work piece (lamp). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to discharge the cleaning liquid from the container, in order to provide a fresh fluid need to clean the work piece.

Referring to claim 9, JP '585-Cawlfeld discloses a holding tool for holding a plurality of translucent tubes (see '025, Col. 5, lines 42-43). Further, one having ordinary skills in the art would entertain the idea to provide a holding tool capable of supporting a plurality of lamps to reduce manufacturing time in mass production.

Referring to claim 10, JP '585-Cawlfeld discloses the cleaning liquid being water. JP '585-Cawlfeld is silent regarding it being pure or ultrapure water. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide pure water or ultrapure water, as the water disclosed by the references, in order to avoid contaminants that could be present in the water.

In regards to claim 11, JP '585-Cawlfeld discloses:

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a first step of introducing a first cleaning liquid as the cleaning liquid from the one end of the translucent tube; and

a second step of introducing a second cleaning liquid other than the first cleaning liquid (see '025, Figs. 5(a)-5(b) and Col. 10, lines 17-19).

Allowable Subject Matter

5. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The references of the Prior Art of Record fail to teach the combination of the limitations as set forth in claim 8, and specifically comprising the limitation of “an ending point of cleaning is determined by monitoring a concentration of the impurities contained in the cleaning liquid in the container”.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

The Examiner notes that while claims 14-20 were not elected (see Communication filed July 24, 2003), the claims in the last listing of claims (Communication filed February 2, 2004) are not identified as “withdrawn”.

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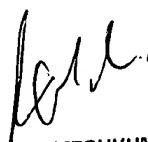
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to German Colón whose telephone number is 571-272-2451. The examiner can normally be reached on Monday thru Thursday, from 8:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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